

REMARKS

Claims 21-31 are copied verbatim from U.S. Patent No. 5,595,164, granted January 21, 1997, to Jan P. Thimmesch. Claims 21-27 correspond to Thimmesch claims 1-7 and claims 28-31 correspond to Thimmesch claims 10-13. In accordance with 37 CFR 1.607(a), the copied claims, corresponding to the count presented hereinbelow, can be specifically applied to applicant's disclosure as specified in the attached Claims Analysis.

Pursuant to 37 CFR §1.607(a)(1), applicant "presents" the following proposed count 1 which is identical to claim 1 of U.S. Patent No. 5,595,164:

1. A heating device for use in an internal combustion engine comprising:
a frame including connecting means for attaching said frame to an engine and a recessed body portion having an aperture;
an electric heating element coupled to said frame;
a terminal assembly connected to said heating element for conducting an electric current thereto, said terminal assembly passing through said aperture in said recessed body portion, said terminal assembly including a first portion connected to said heating element and a second portion removably engageable with said first portion, said second portion being disposable through an opening in the engine for engagement with the first portion of the terminal assembly; and
grounding means electrically connected to said heating element.

Applicant submits that patentee's claims 1-23 correspond to count 1. As noted above, patentee's claim 1 is identical to the proposed count. The limitations of the proposed count find support in applicant's disclosure as noted in the attached Claims Analysis. Similarly, patentee's claim 2-7 and 10-13 correspond to the proposed count and find support in applicant's disclosure as also set forth in the attached Claims Analysis. Applicant has not copied patentee's claims 8-9 and 14-23. However, as discussed below, the limitations disclosed in patentee's claims 8-9 and 14-23 are obvious in view of the proposed count and thus these claims correspond to the count.

Patentee's claims 8, 15, and 21 include the recitation that the heating device further consists of a "second heating element and coupling means for connecting said heating elements in series." Patentee's claims 9, 16, and 22 similarly include the limitation that the heating device further consists of a "second heating element and coupling means for connecting said heating elements in parallel." However, since the heating devices are intended to operate as convection-type intake air heaters wherein an electric heating element warms transient air (see e.g., Thimmesch at Col 4, Lines 49-51 and applicant's disclosure at Page 10, Lines 7-10), the use of heating elements connected in series and/or parallel would be clearly obvious in view of the subject matter of the proposed count and as evidenced by the use of similarly designed heating elements in other prior art convection heaters. See e.g., U.S. Patent 5,171,973 to Higgins, and U.S. Patent 5,471,034 to Kawate et al. (copies attached)

Patentee's independent claims 17 and 23 include the recitation that a gasket "be disposed between the upper surface of said perimeter mounting member and said cover plate." Both applicant's disclosure and Thimmesch's patent disclose the use of a gasket disposed between the lower surface of the perimeter mounting member and the cylinder head, but only the Thimmesch patent discloses a gasket in both locations (above and below the surface of the perimeter mounting member). The seemingly arbitrary use of either one or two gaskets in prior art manifolds accordingly renders this feature clearly obvious to a person of ordinary skill in the art in view of the subject matter of the proposed count and the prior art of record. See e.g., U.S. Patent 3,858,564 to Beatenbough - heated manifold utilizing two gaskets, and U.S. Patent 3,667,432 to Greathouse - air manifold utilizing one gasket. Therefore, the limitation of independent claims 17 and 23 is merely an obvious variation of the intake air heater of the proposed count.

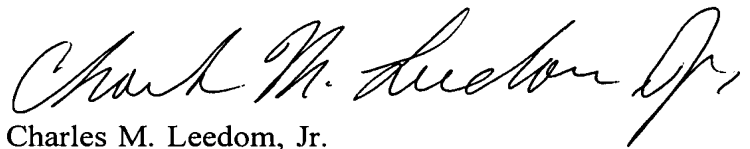
Finally, patentee's claims 14 and 18, respectively include the recitation that "a first bolt having a head and a threaded body is adapted to cooperate with a threaded passage" and "said tab projection has a threaded orifice formed therein." This difference over the proposed count is clearly insignificant and claims 14 and 18 should be considered as corresponding to the proposed count.

Applicant submits that its pending claims 14-20 *do not* correspond to proposed count 1. All of these claims recite the use of an air delivery conduit mounted adjacent the top surface of a cylinder head to direct intake air into an intake manifold formed integrally in a cylinder head and also function as an aftercooler or heat exchanger. None of the prior art of record and no prior art which applicant is aware utilizes an air delivery conduit functioning as an aftercooler or heat exchanger in combination with an intake manifold formed integrally in a cylinder head. It is therefore respectfully submitted that applicant's claims 14-20 define a separate patentable invention, within the meaning of 37 CFR §1.601(n), from the claims corresponding to count 1.

Because the effective filing date of the subject application is more than three months after the effective filing date of the application that matured into U.S. Patent no. 5,595,164, applicant is preparing and will submit a declaration under 37 CFR 1.608(b) making a *prima facie* showing that the applicant is entitled to judgment under § 1.608(b).

Respectfully submitted,

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